

# Siemens PLM Connection

## Teamcenter Content Management

Troy Banitt

Teamcenter Product Management

Trish Laedtke

Center of Excellence

Siemens  
PLM Connection



Americas 2008

PLM Software  
Answers for industry.

**SIEMENS**

# Teamcenter Digital Lifecycle Management Solutions

The slide displays a grid of 12 boxes, each representing a different solution or module within the Teamcenter Digital Lifecycle Management system. The modules are arranged in three rows: the top row contains five boxes; the second row contains four boxes; and the third row contains three boxes. Below the grid, there are three horizontal bars with text labels.

<b>SYSTEMS ENGINEERING &amp; REQUIREMENTS MANAGEMENT</b>	<b>PORTFOLIO, PROGRAM &amp; PROJECT MANAGEMENT</b>	<b>ENGINEERING PROCESS MANAGEMENT</b>	<b>BILL-OF-MATERIALS MANAGEMENT</b>	<b>COMPLIANCE MANAGEMENT</b>
<b>SUPPLIER RELATIONSHIP MANAGEMENT</b>	<b>MECHATRONICS PROCESS MANAGEMENT</b>	<b>MANUFACTURING PROCESS MANAGEMENT</b>	<b>SIMULATION PROCESS MANAGEMENT</b>	<b>MAINTENANCE REPAIR AND OVERHAUL</b>
<b>LIFECYCLE VISUALIZATION</b>				
<b>REPORTING &amp; ANALYTICS</b>				
<b>COMMUNITY COLLABORATION</b>				
<b>ENTERPRISE KNOWLEDGE MANAGEMENT</b>				

# Enterprise Knowledge Management

## Agenda

### Teamcenter Content Management Overview

- Why Tech Pubs support
- What is Content Management
- Basic functionality
- Availability

### Demo

- Review interface
- Build document structure
- Author new content and reference graphics
- Publish

### Q&A



## Why Technical Pubs Support?

The **volume of product information** that must be published when the product goes to market is resulting in missed product launches and increased production costs.

### Challenges

- Diverging Documentation: Keeping up with **product changes**
- Launch Delays: **Concurrent development** of product and documentation
- Amplification of the **Global Trend**: Managing translation content
- **Compliance** with Federal and Industry publications standards



## Business Challenge

"We have a number of products that have shared features, and one of the biggest challenges we are currently facing is developing targeted documentation. We are planning to switch to a robust content management system that would help us in developing customized documentation for our customers."

*Bonni Graham, Scantron Corporation*

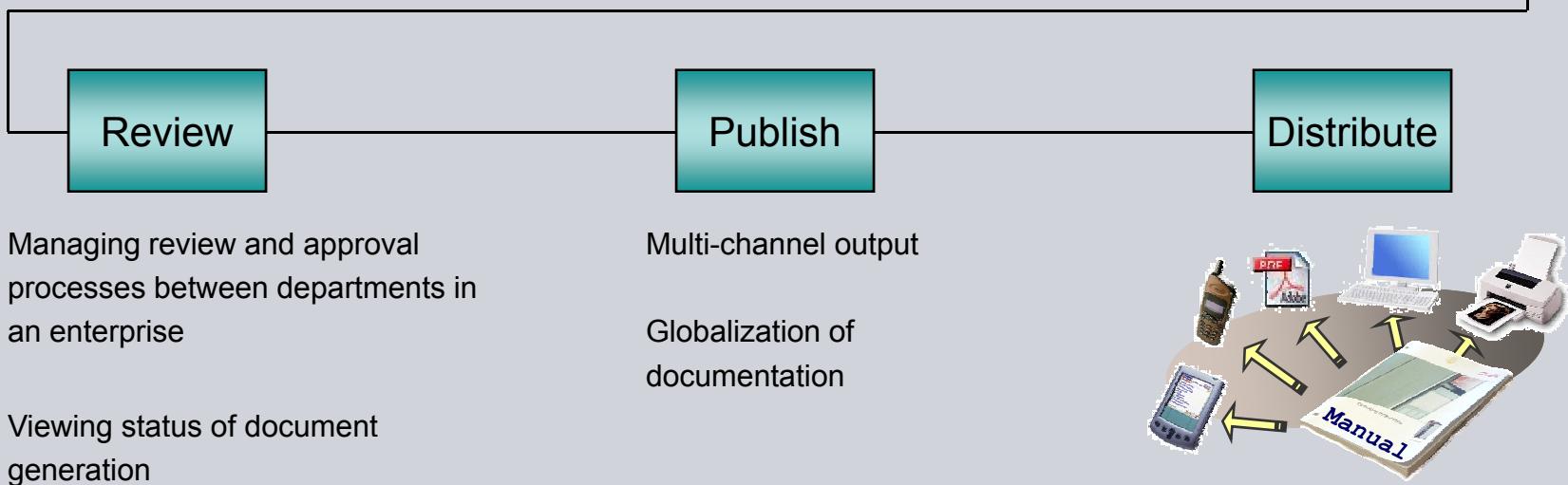
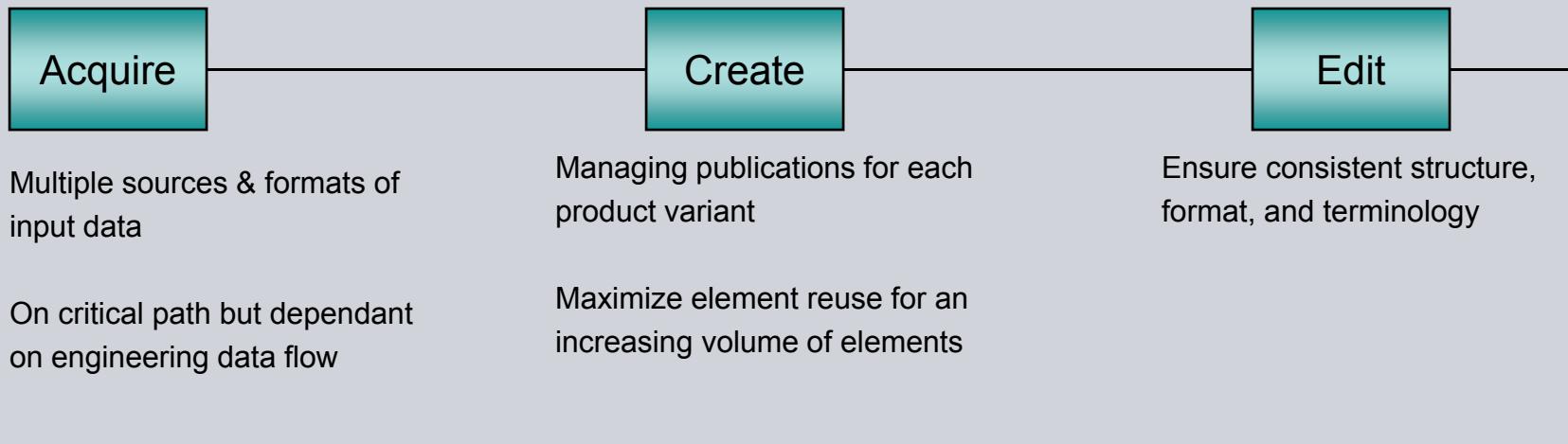
"...Manufacturers are increasing their focus on product documentation and making it an integral part of the entire product lifecycle.

### Goals of Improved Technical Documentation

Faster time to market	61%
Product development cost reduction	58%
Higher quality product documentation	47%
Promote reuse and efficiencies	47%
Identify and automate documentation updates based on product changes	44%

Source: AberdeenGroup, June 2006

# Technical Documentation Challenges



## Typical Disconnected Environment

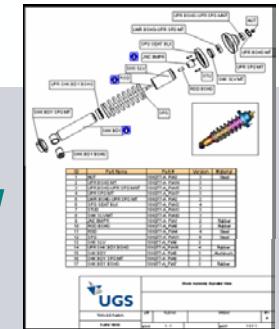
**AUTHOR:**

Create / Layout /  
Manage Assets



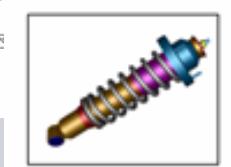
**PREVIEW/  
PUBLISH:**

Export documents  
for viewing



**INPUT:**  
Leverage  
Enterprise  
Knowledge

ID	Part Name	QTY
1	NUT	109277.A
2	UPR BSHD-UPR SPG MNT	109277.A
3	UPR SPGMNT	109277.A
5	UWR BSHD-UPR SPG MT	109277.A
6	SPG SEAT BLK	109277.A
7	SPG	109277.A
8	SHK SLVMT	109277.A
9	UNC IMPR	109277.A
10	ROD BSHD	109277.A
11	SHK BOY	109277.A
12	SPG	109277.A
13	SHK SLV	109277.A
14	UPR SHK BOY BSHD	109277.A
15	SHK BOY SPG MNT	109277.A
16	SHK BOY SPG MT	109277.A
17	SHK BOT BSHD	109277.A



**VIEW:**  
Examine  
authored  
documents

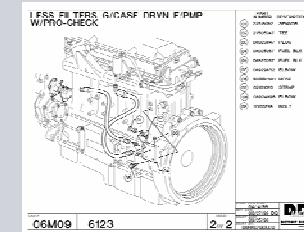
Comments

# Teamcenter Content Management – Use Cases

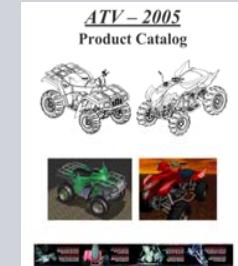
***Manage the generation and publishing of SGML/XML based information***

Applications of content management include:

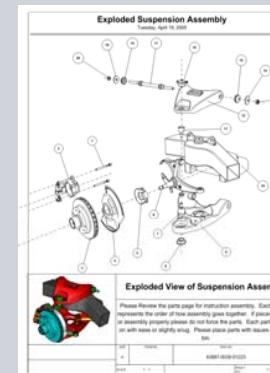
- **Technical and Users Manual** generation – aerospace, defense, automobile, machinery, consumer products
- Online and off-line **Parts and Product Catalogs** generation
- **Work Instructions** Generation
  - Manufacturing Process Sheets
  - Assembly/Disassembly Instructions
  - Service & Repair Manuals
  - MRO – **Logistics Support documents** (e.g. maintenance or repair instructions)



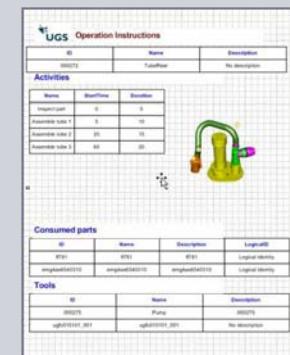
User Manuals



Product Catalogs



Mfg Process Documentation



Work Instructions



Product Labels / Packaging

# Teamcenter Content Management

## Multi-Channel Publishing – a.k.a. Re-purposing

SIEMENS

### Authors / Subject Matter Experts



Process  
Instructions



Graphics



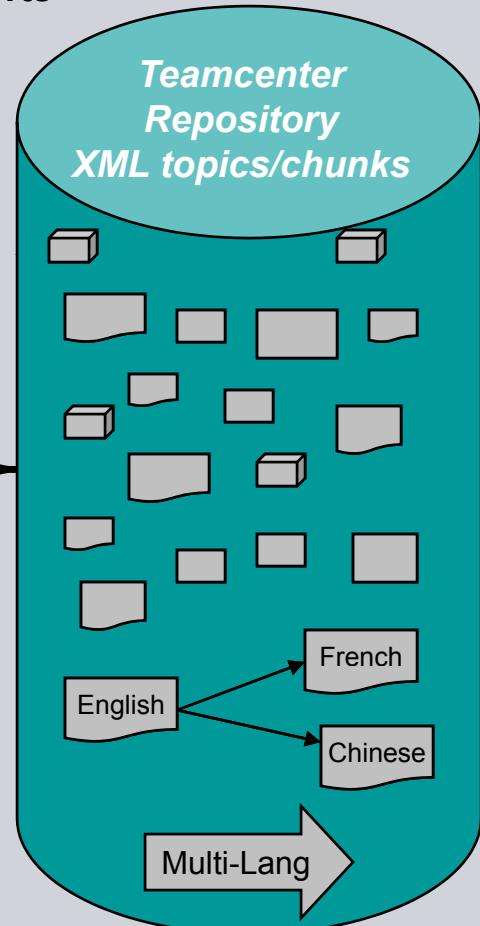
Legal



Warranty



Recall  
Notices



Automated  
Assembly  
and Publishing  
Server

### English Documents



User Manual



Print or PDF



Repair Manual



Web



Service Bulletins



CD/DVD



Recall Notices



Handheld

Multi-Formats



用户手册



Print or PDF



修理手册



Web



服务公告



CD/DVD



回忆通知



Handheld

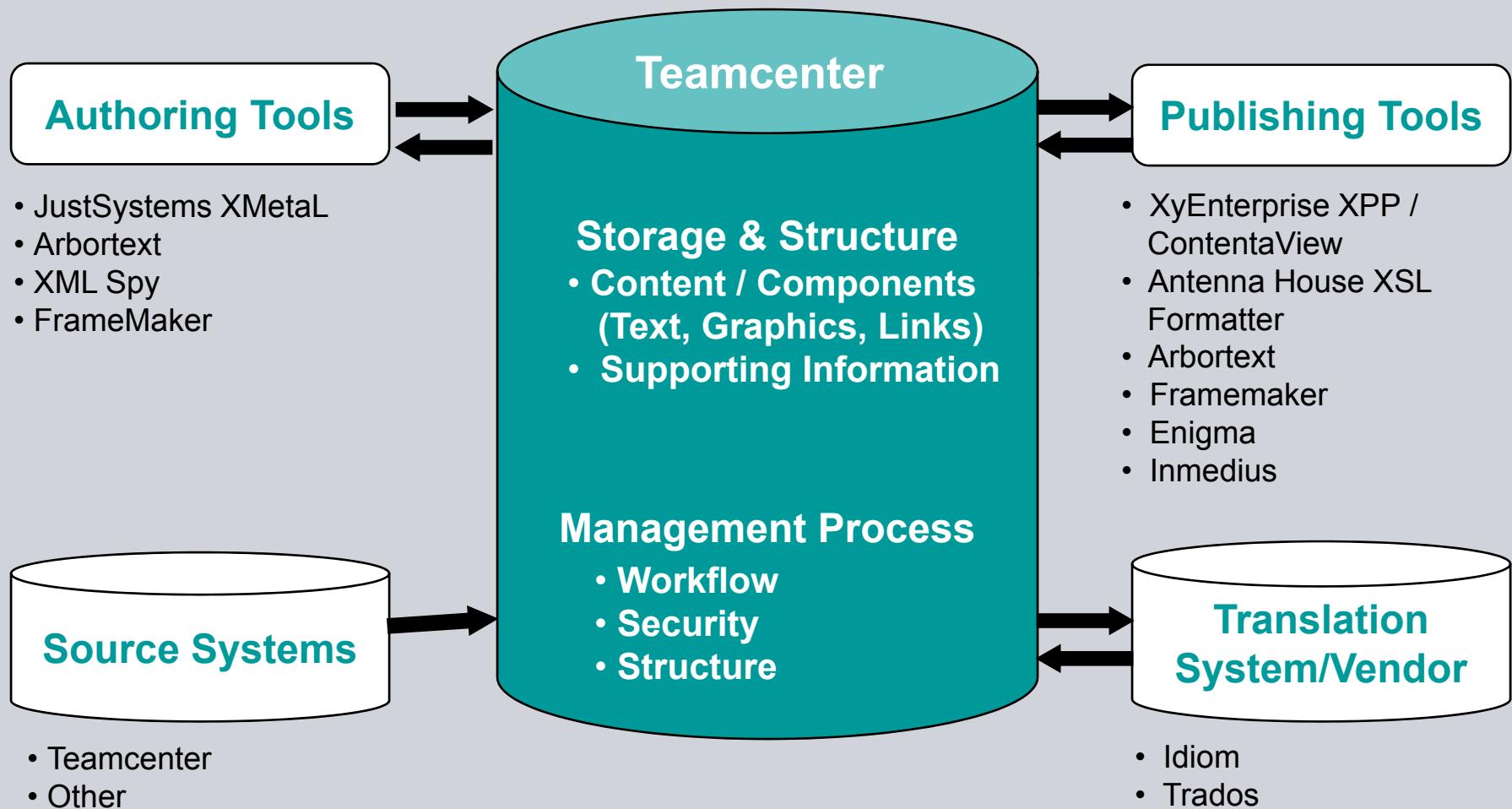
### Chinese Documents

Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

# Teamcenter Content Management

## *Environment Components*

**SIEMENS**



# Content Management

## Leveraging XML/SGML Components

SIEMENS

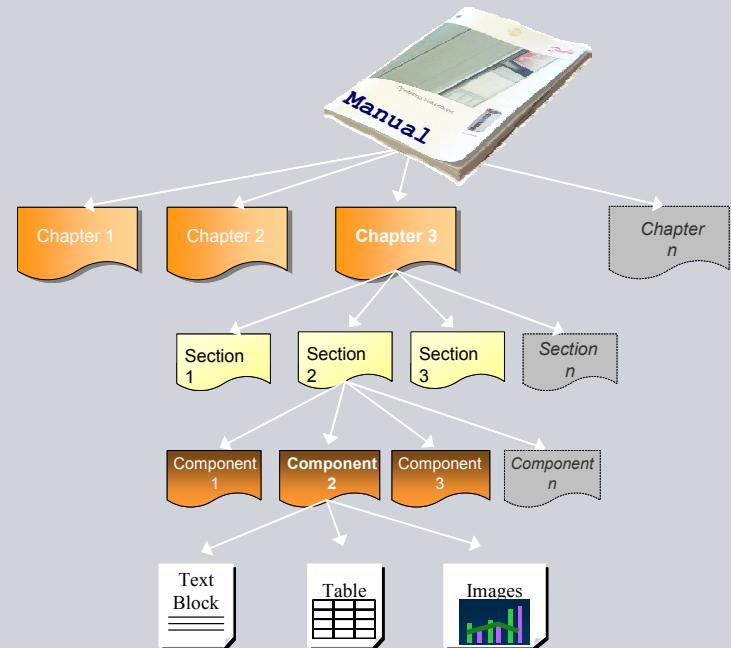
**More pieces** to manage drives a need for a system to management them

Facilitates **content reuse** and collaboration

Supports intelligent content **exchange**

Structured (**SGML or XML**)

- Consistent structure - Schema / DTD
- Validation - Schema / DTD
- Multi-channel output - Style sheets
- Archiving in standard format



Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

## XML Document Benefits

XML documents can be “smart”

- ... more abstract and general
- ... have as much metadata as is useful
- ... integrated with other information systems

Smart documents can become active participants  
in business processes

- As computer-readable data objects
- As interactive online documents
- As printed or PDF documents



# XML Construction: Data Models

DTDs or Schemas

Data models ensure consistency

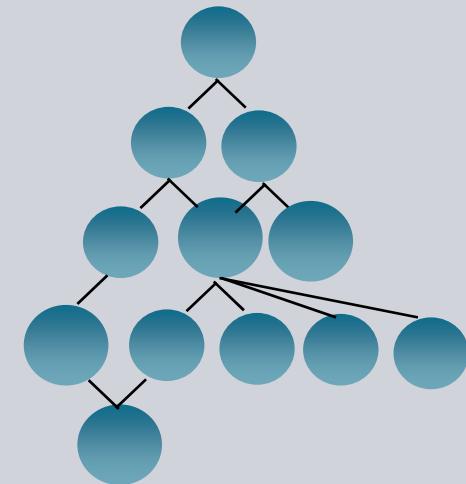
- A set of declarations that conform to a particular syntax structure and types of content allowed
- Ensure the ability to format to multiple media using scripts

Allow for interchange

- Between documents
- Between organizations
- Between systems



**Training**



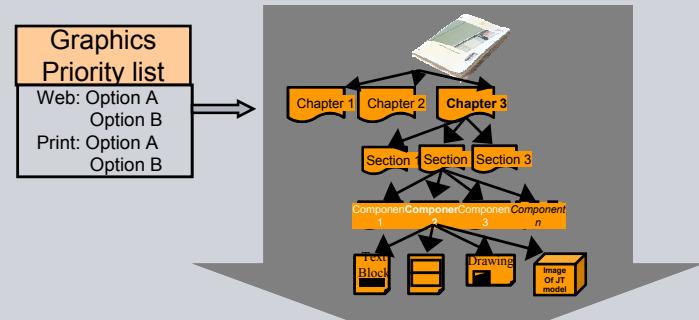
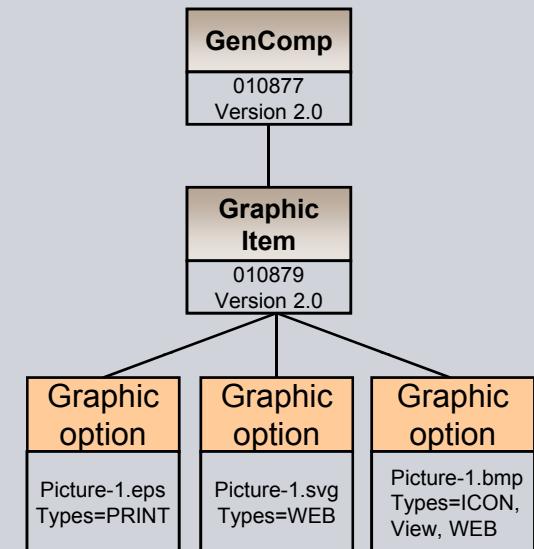
**Owners Manual**

# Teamcenter Content Management

## Graphics Management

SIEMENS

- Manages multiple instances of a graphic
  - Formats
  - Language
- Captures / Imports Graphics
  - Rich Client
  - User Authoring Session
- Publishes in Context
  - Media
  - Customer



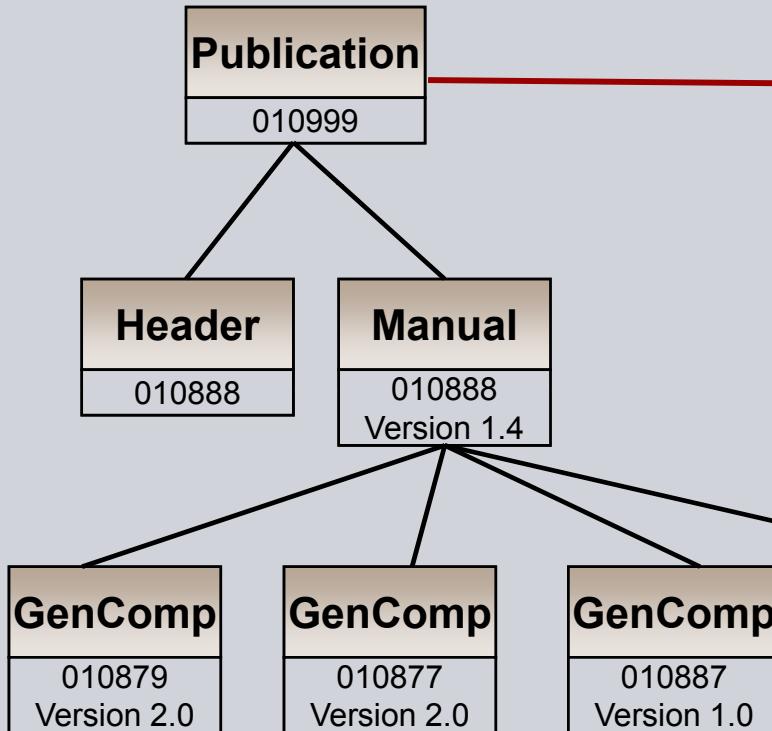
Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

# Teamcenter Content Management

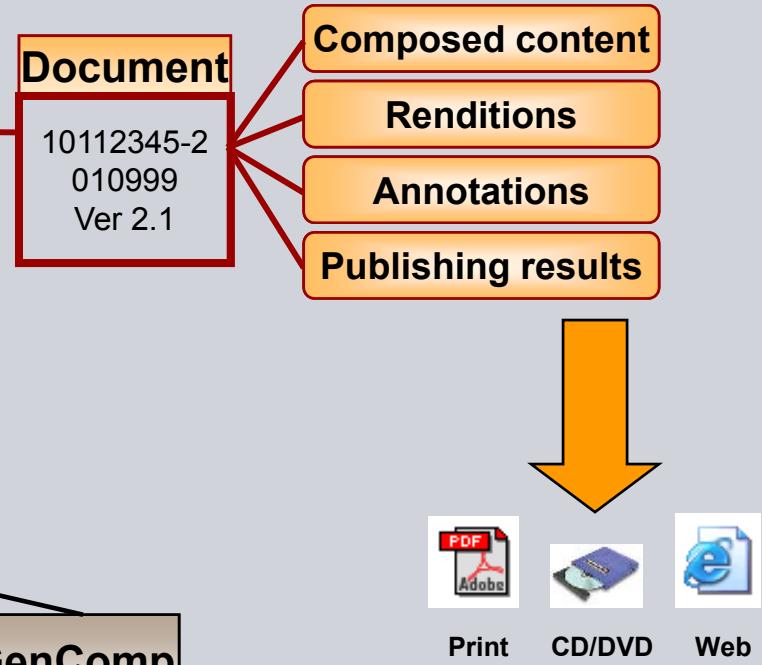
## Publishing / Delivery

SIEMENS

### Publication Structure



### Published Documents



# Teamcenter Content Management

## Translation Order Request

SIEMENS

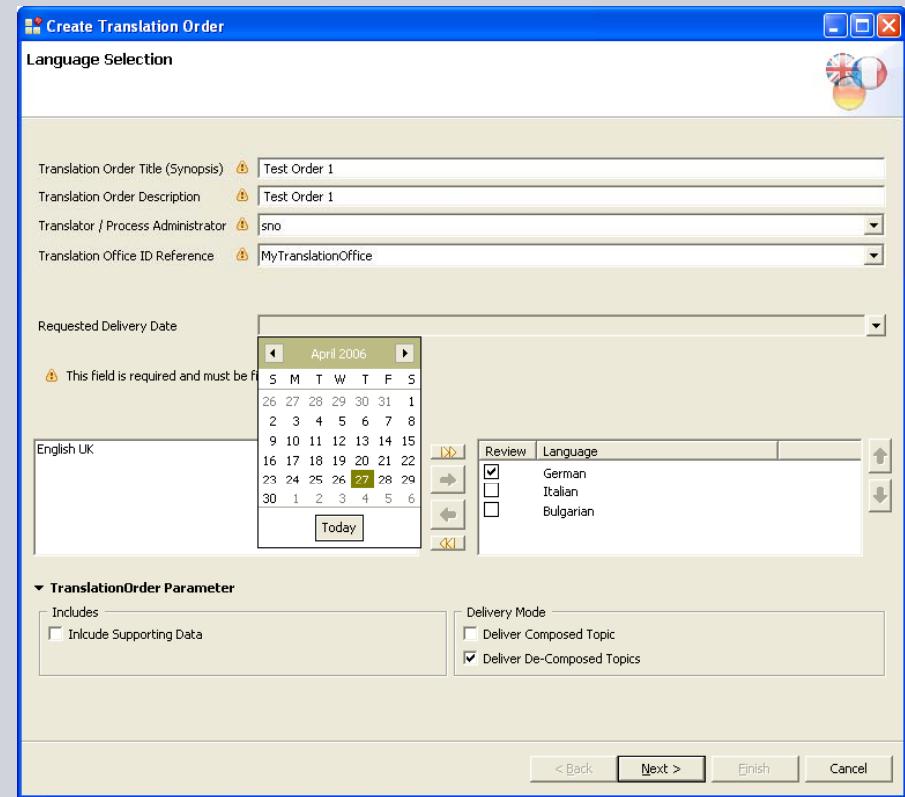
Components are managed by **language**

Users can request translation by

- **Any level** in the document structure
- Specific languages
- **Multiple** translation “offices”

System automatically

- Builds the translation order
- Organizes components
- Tracks status
- **Imports returned content**
- Relates it to source



Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

# Teamcenter Content Management

## Ease of Administration

SIEMENS

Configuration and setup are done with UIs

- No coding, command lines

The screenshot displays the Siemens Teamcenter Content Management interface, highlighting its ease of administration through graphical user interfaces.

**Attribute Map Table:** A table showing mappings between attribute names and functions. The columns are Attribute Name, Function, Path, Field S..., and fixed. Key rows include:

Attribute Name	Function
xmlNumber	BIDIRECTIONAL
versionNumber	BIDIRECTIONAL
title	COMPOSE
protected	DECOMPOSE
title	EXPORT_FILE_NAME
masterLanguageRef...	FIRST_COMPOSE
languageReference	TRANSLATED_COM...
masterLanguageRef...	NON_TRANSLATED...
title	TRANSLATED_COM...
contentVersion	TRANSLATION_SUB...
contentVersionRefer...	TRANSLATION_REC...
title	TRANSLATION_REC...
languageReference	TRANSLATION_REC...

**Create Publishing Tool:** A configuration dialog for a publishing tool. The fields are:

Tool name	com.doccenter.client.common.publisher.log.C
Tool Activation	EDIT
Tool Command	
Tool path	
Graphic Priority Table Reference	yes
Download graphics	yes
Download schema	yes
Download stylesheet	yes
Local Indicator	yes
Number of Instances	
Processing instruction	
System Usage	USER

**Integration:** A tree view showing DITA configurations and their usage by tools like XMetaL5.

- DITA** (implemented by Stylesheet)
  - concept2epic,A,1
  - dita.concept.xac,A,1
  - dita.database.xac,A,1
  - dita.reference.xac,A,1
  - dita.task.xac,A,1
  - dita.topic.xac,A,1** (selected)
- used by tool**
  - XMetaL5

# Teamcenter Content Management

## *Solution Strategy*

SIEMENS

Build “**platform**” for content management

- Components, structure, languages

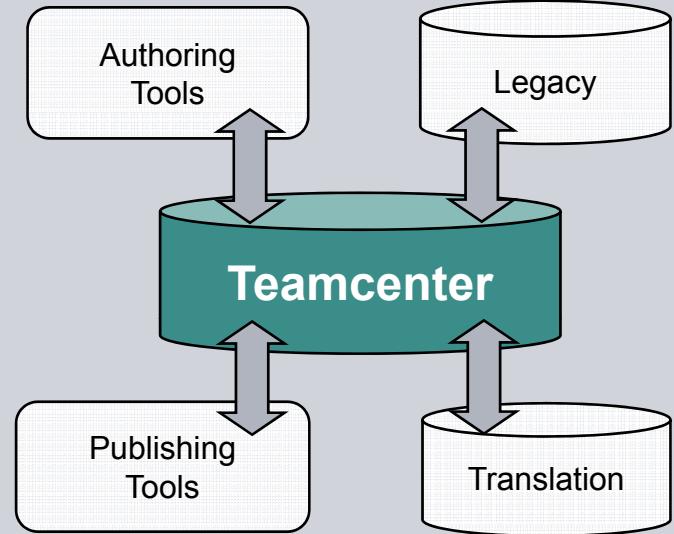
Manage **topics**

- Text - multiple languages
- Graphic - multiple languages, formats
- Relationships between components  
(link management)

Provide **framework** to support any SGML/XML applications

Support leading **SGML/XML** applications

- **Authoring** (e.g., XMetaL, Arbortext Editor, XMLSpy)
- **Publishing** (e.g., XSL Formatter , XyEnterprise XPP, Arbortext Publishing Engine)

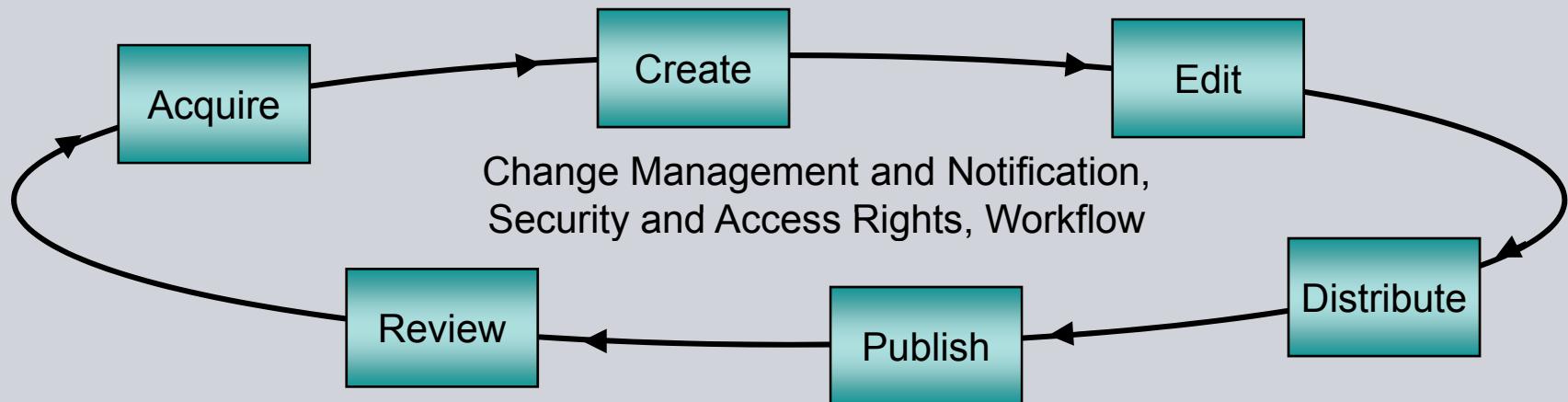


# Extending Documentation Value through Teamcenter Content Management

SIEMENS

What value does the system provide?

- Enables integration of authoring and publishing systems to a **single environment**
- Facilitates **rapid publication** of product variant documents
- Ensures completion of **critical path** documentation dependent on engineering data flow
- Supports **multiple formats and languages**
- Maximizes component and topic **re-use**
- Facilitates systematic and **repeatable processes**



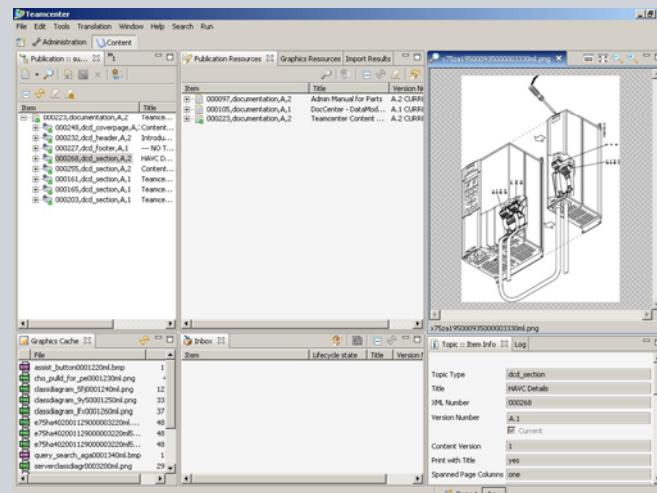
Everything related to document & process gets easier and faster !

Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

## Availability

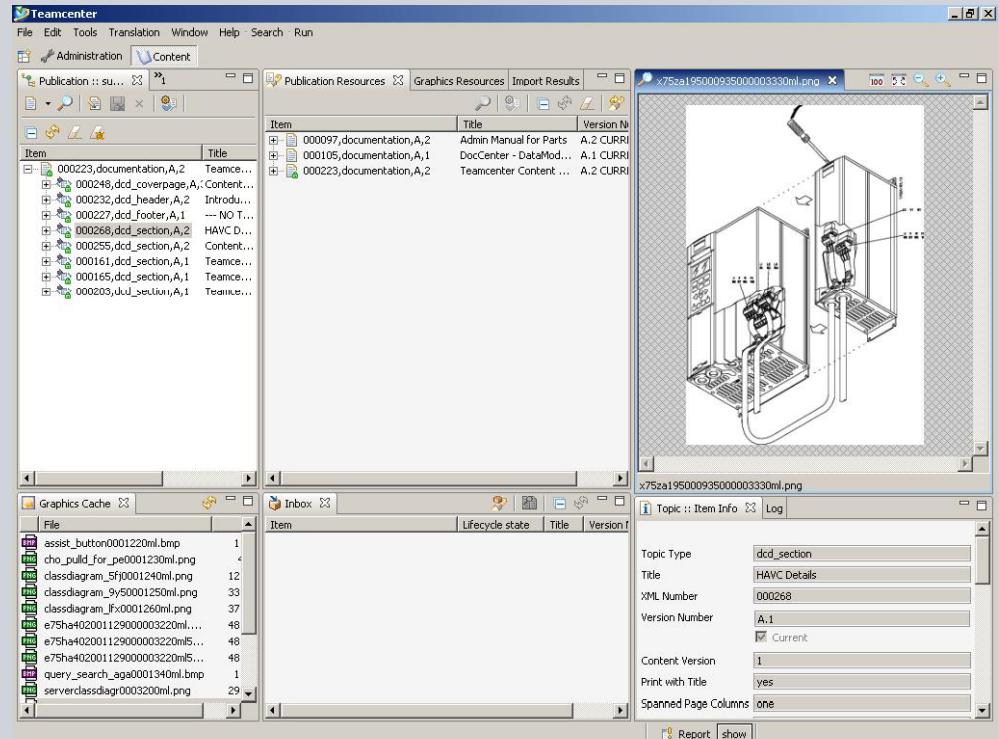
Teamcenter Enterprise 2005 SR1  
Teamcenter Enterprise 2007.1  
Teamcenter 8

Available Today  
Available Today  
End 2008



# Demo

- Review interface
- Build document structure
- Author new content and reference graphics
- Publish



# Siemens PLM Connection

Thank You



Siemens  
PLM Connection



Americas 2008

